Incorporating Sustainability into the K-12 Math Curriculum

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Beginning Thoughts

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- **Challenge!** Ask questions, side track me, etc. to keep me from getting to the last slide.
Key Belief

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Many of us are neither trained nor experienced in dealing with the emotions that will be brought out in our students when dealing with real-world, value-laden issues. In fact, many of us aren’t comfortable dealing with real-world, value-laden issues at all.
Axioms of Sustainability

- The current state of people is not a morally acceptable endpoint of societal development.
- Humans have reached a state where we are negatively impacting the ability of future generations to meet their needs and aspirations.
- The major types of problems facing humanity have to be addressed simultaneously: there is no ranking of importance.
- Our complex social-ecological system requires fundamental changes.
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• Teach specific skills that empower students to become catalysts and leaders of change.
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Add one thing a year.
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Where is material found?
W2: 372 cubic ft/hectare/mm
W6: 31 cubic ft/hectare/mm

The value of an ecosystem service?
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W6: 31 cubic ft/hectare/mm
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In U.S., most common age for whites is much older than for minorities

Number of people of each age by race/ethnicity, 2018

Most common age in 2018 among whites

Note: White, black, Asian, multiracial, American Indian/Alaska Native (AIAN) and Native Hawaiian/Pacific Islander (NHPI)
• [http://sustainabilitymath.org/](http://sustainabilitymath.org/)
Final Thoughts

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- So, what do I tell students?

- "donate" by supporting sustainable practices
- Also, learn practical skills.
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• It now is a matter of how doomed we are. Be educated, vote, get involved.
• “donate” by supporting sustainable practices
• Also, learn practical skills.
“A human being should be able to change a diaper, plan an invasion, butcher a hog, conn a ship, design a building, write a sonnet, balance accounts, build a wall, set a bone, comfort the dying, take orders, give orders, cooperate, act alone, solve equations, analyze a new problem, pitch manure, program a computer, cook a tasty meal, fight efficiently, die gallantly. Specialization is for insects.”

Thanks You!

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- http://sustainabilitymath.org/